

## ABSTRACT

### ANALYSIS OF THE RELATIONSHIP BETWEEN THE INCIDENCE OF NAUSEA AND VOMITING IN THE USE OF CYCLOPHOSPHAMIDE, DOXORUBICIN AND VINCRISTINE CHEMOTHERAPY REGIMENS WITH THE QUALITY OF LIFE OF RETINOBLASTOMA PATIENS IN DR. SOETOMO HOSPITAL

**Ayu Diah Pratiwi, S.Farm., Apt.**

**Background:** Retinoblastoma is an intraocular malignant tumor that is most common in children. The incidence is 1 in 15,000 life births. The Children's Oncology Group (COG) recommends chemotherapy drugs that are used in intraocular retinoblastoma patients, vincristine, etoposide and carboplatin. While chemotherapy drugs used in extraocular retinoblastoma patients are vincristine, cisplatin, cyclophosphamide, and etoposide. Chemotherapy induced nausea and vomiting (CINV) is one of the side effects of chemotherapy can make patients not follow chemotherapy properly. A systemic review study states that CINV has a major influence on the quality of life of patients.

**Objectives:** The purpose of this study was to analysis the relationship between the incidence of nausea and vomiting in the use of cyclophosphamide, doxorubicin and vincristine chemotherapy regimens with the quality of life of retinoblastoma patients in Dr. Soetomo Hospital.

**Methods:** Samples were collected from an observational analytic study with a prospective approach in August-October 2018. The method used was a survey method using the PedsQL 3.0 Cancer Module questionnaire, to describe the quality of life of retinoblastoma patients and Morrow Assessment of Nausea and Emesis Follow Up questionnaire, to measure the incidence of side effects of nausea and vomiting experienced by patients while undergoing chemotherapy, which then in statistical analysis to determine the correlation.

**Result:** We enrolled 19 patiens. The results of this study were the Morrow Assessment of Nausea and Emesis Follow Up questionnaire instrument, which was higher than the incidence of acute and delayed nausea compared to the score of acute and delayed vomiting events with an average value of  $1 \pm 0.816$ . The highest quality of life dimension is found in the communication dimension with mean value  $91.23 \pm 21.779$  while the lowest quality of life dimension score is in the procedural anxiety dimension with an average value of  $48.68 \pm 28.769$ . The results of Pearson correlation test showed that there was a negative relationship between the incidence of nausea and vomiting with the quality of life of retinoblastoma patients after being given cyclophosphamide, doxorubicin and vincristine chemotherapy regimens ( $p=0.040$ ).

**Conclusions:** Conclusion of this study is that the incidence of nausea and vomiting was associated with the poor quality of life of retinoblastoma patients after receiving cyclophosphamide, doxorubicin and vincristine chemotherapy regimens.

**Keywords:** Retinoblastoma, Chemotherapy, Nausea and vomiting, Quality of life.